(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
1 April 2004 (01.04.2004)

PCT

(10) International Publication Number
WO 2004/027430 A1

(51) International Patent Classification[7]: G01N 33/66, 33/74

(21) International Application Number: PCT/GB2003/004128

(22) International Filing Date: 19 September 2003 (19.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0221686.9 19 September 2002 (19.09.2002) GB

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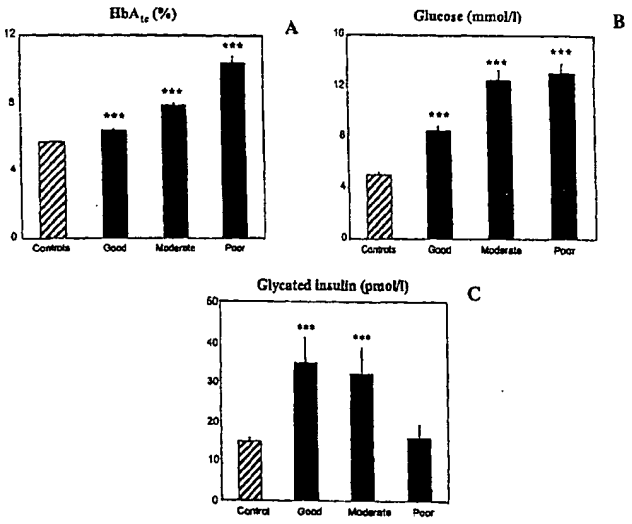
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

[Continued on next page]

(54) Title: GLYCATED INSULIN AS A BIOMARKER FOR DIAGNOSIS AND MONITORING OF DIABETES



(57) Abstract: One of the major pathophysiological consequences of long term elevation of plasma glucose in diabetes is an increase in the non-enzymatic glycation of proteins. Contrary to expectations the present inventors have determined that individuals with well controlled short duration diabetes have particularly high concentrations of glycated insulin which decrease with increased disease severity and duration of diabetes. Further, a small proportion of apparently normal healthy individuals exhibit high glycated insulin levels in line with expected incidence of diabetes in the population. Methods of predicting the onset of diabetes and for monitoring the progression of diabetes by measuring the concentration of Glycated Insulin and the progression of diabetes are disclosed.

WO 2004/027430 A1

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